

REMARKS

Claims 1-3, 5, 7 and 10-15 are now pending in the application. Claims 1-3, 5 and 7 have been currently amended and claims 4, 6, 8 and 9 have been canceled. New claims 11-15 have been added. Pending claims 1, 3, 4, 5, 8 and 10 stand rejected under 35 U.S.C. § 102(b) and claims 1-3 and 5-9 stand as rejected under 35 U.S.C. § 103(a). The forgoing amendments and following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance. An early Notice of Allowance is therefore requested.

I. Oath/Declaration

The Examiner has objected to the oath or declaration because it is defective for not identifying the citizenship of the seventh inventor.

Applicants submit the corrected oath or declaration with this Amendment that identifies the citizenship of the seventh inventor.

II. Specification

The Examiner objects to the specification because of a typographical error on page 9, line 5 the word “diglycol” should be replaced with “diglycerol”.

As the Examiner suggests, Applicants have amended the specification to replace the word “diglycol” with the word “diglycerol” in paragraph [0015].

III. Claim Objections

The Examiner has objected to claim 7 because the phrase “wherein the diglycerol is contained by not less than 50% by weight with respect to the total amount of the water-soluble organic solvent including the diglycerol” because there is no antecedent basis seen in the specification.

Applicants respectfully disagree with the Examiner. The phrase “wherein the diglycerol is contained by not less than 50% by weight with respect to the total amount of the water-soluble organic solvent including the diglycerol” is found in the specification in paragraph [0007]. In addition, the present application describes in Examples 2 and 3 that the diglycerol is contained by not less than 50% by weight with respect to the total amount of the water-soluble organic solvent including the diglycerol (50.0% by weight in Example 2 and

83.3% by weight in Example 3). See Table 1 on page 21 of the specification. Thus, Applicant respectfully request reconsideration and withdrawal of this objection.

IV. Rejection Of Pending Claims 1, 3, 4, 5, 8 and 10 Under 35 U.S.C. § 102 (b)

Claims 1, 3, 4, 5, 8 and 10 stand as rejected under 35 U.S.C. § 102 (b) as being anticipated over Saibara et al., U.S. Patent No. 6,013,124, issued January 11, 2000 ("Saibara"), as applied to currently amended claim 1. Applicants respectfully traverse this rejection.

A. Relevant Law

"A claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Bristol-Myers Squibb v. Ben Venue*, 246 F.3d 1368, 1374 (Fed. Cir. 2001). Identity of invention requires that a prior reference disclose to one of ordinary skill in the art all elements and limitations of the patent claim. *Scripps Clinic v. Genentech*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). Absence from the reference of any claimed element negates anticipation. *Kloster Speedsteel AB v. Crucible, Inc.*, 230 USPQ 81 (Fed. Cir. 1986).

B. Summary of Cited References

Saibara teaches a pigment ink for ink-jet recording comprising a pigment, a polyethylene oxide containing dispersing agent, a water-soluble organic solvent, polyethylene oxide and water. See Abstract. However, nothing in Saibara either teaches or suggests an ink for ink jet recording comprising a pigment, water, and diglycerol, wherein the ink is solidified into a solid matter when the water contained in the ink is evaporated, and the solid matter is redissolved in the ink which is not solidified.

C. Argument

Currently amended claim 1 defines an ink for ink-jet recording comprising a pigment, water, and diglycerol, wherein the ink is solidified into a solid matter when the water contained in the ink is evaporated, and the solid matter is redissolved in the ink which is not solidified.

Saibara teaches a pigment ink including a pigment, a polyethylene oxide-containing dispersing agent, a water-soluble organic solvent, polyethylene oxide, and water as essential components. See Abstract and column 2, lines 7-13.

In addition, Saibara teaches that “solid matters produced by drying of the pigment ink have a soft property ... the solid matters are easily dissolved again”. See column 3, lines 29-33. Saibara further teaches that the polyethylene oxide-containing dispersing agent causes this effect that “solid matters produced by drying of the pigment ink have a soft property ... the solid matters are easily dissolved again” by adsorbing to the pigment surface thereby making interaction with the water-soluble organic solvent. See column 3, lines 38-53.

Since all the inks of Embodiments 1-9 taught by Saibara always use the polyethylene oxide-containing dispersing agent, it is appreciated that the polyethylene oxide-containing dispersing agent is essential to the inks of Saibara. In addition, since all the inks of Embodiments 6 to 9 taught by Saibara do not include either polyethylene glycol or diglycerol, it is appreciated that in Saibara the polyethylene oxide-containing dispersing agent causes the effect that “solid matters produced by drying of the pigment ink have a soft property ... the solid matters are easily dissolved again”.

On the other hand, in the present application, it is not required that the ink includes that polyethylene oxide-containing dispersing agent as an essential component. Rather, as defined in amended claim 1, the ink of the present invention includes components, in particular, diglycerol which is different from those of Saibara so as to cause the effect that “the solid matter is redissolved in the ink”.

Saibara fails to teach or disclose each and every limitation of independent claim 1. To the extent that the Examiner finds each and every limitation of claim 1 in Saibara, it nonetheless is insufficient for it does not contain an enabling disclosure. Thus, the invention

defined in amended claim 1 and the dependent claims thereof is not anticipated by Saibara. Please note that original claim 6 in which diglycerol is contained has not been rejected by Saibara in this Office Action. For these reasons, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 (b) are respectfully requested.

V. Rejection Under 35 U.S.C. § 103 (a)

The Examiner rejected claims 1-3 and 5-7 under 35 U.S.C. § 103 (a) as being unpatentable over Nakano (U.S. Patent No. 6,676,736). The Examiner also rejected claims 1-3 and 5-9 under 35 U.S.C. § 103 (a) as being unpatentable over Miyamoto (U.S. Patent No. 6,390,710).

To advance prosecution of this application, Applicants have incorporated claim 4 into independent claim 1. Neither Nakano nor Miyamoto teaches or suggests the feature of original claim 4 which has been incorporated into amended claim 1. Please note that the original claim 4 has not been rejected by Nakano or Miyamoto in this Office Action. Accordingly, Applicants submit that claim 1 and its dependent claims 2, 3, 5 and 7 should be allowable. Note that claims 6, 8 and 9 have been canceled by this amendment. Thus, the Examiner's rejection is rendered moot. Withdrawal of the present rejections is respectfully requested.

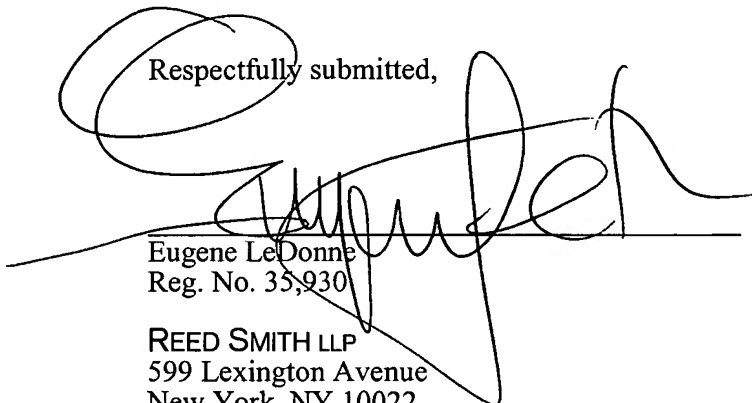
VI. Newly Presented Claims 11-15

Claims 11-15 have been added to the application to recite novel features disclosed in the specification. New independent claim 11 has been added to recite the feature of "an ink for ink-jet recording consisting essentially of a pigment; water; and at least one of polyethylene glycol and diglycerol", and new claims 12-15 have been added that depend from claim 11. No new matter has been added. None of Saibara, Nakano and Miyamoto teaches or suggests the features of new claims 11-15. Therefore, these references cannot anticipate new claims 11-15 and cannot render new claims 11-15 obvious.

VII. Conclusion

For the reasons presented above, claims 1-3, 5, 7 and 10-15, all the claims pending in the application, are believed by Applicants to define patentable subject matter and should be passed to issue at the earliest possible time. A Notice of Allowance is requested.

Respectfully submitted,



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